



# INTERNATIONAL SOCIETY OF ANTIQUE SCALE COLLECTORS

NEWSLETTER 4

APRIL 1977

Greetings, from the City by the Golden Gate

Becoming a collector of anything--especially anything that required dusting--was the farthest thing from my mind as a young person. However, I have always admired the sculptural quality of both scales and weights, and wanted a few for decorative accents. How could I have anticipated the spell these beautiful objects would cast upon both me and my husband Will, whose skill at repairing and restoring my acquisitions has made it practicable to buy many otherwise unuseable scales?

At first, I gathered anything and everything I found. Nothing remotely resembling an old scale was too forlorn or bedraggled to appeal to me. We lugged them all home, and Will goodnaturedly reconstructed them, thanking his lucky stars, meanwhile, that I had not suddenly decided to collect stray dogs or cats. Our home, formerly ample for four persons, grew a mite small for the two of us. At that point, we built an attic gallery where my treasures are displayed alongside Will's scale model steam engines.

Now, with even the attic bulging, I buy mostly weights, which possess the dual advantage of storing compactly and having survived from the earliest cultures. Like Michael Crawforth, I enjoy historical research.

Bob Stein, your hard work in getting ISASC established has already produced tangible results in my life. Since beginning this newsletter, I have had an idea as to a project I can undertake right now, with my present knowledge, which will help prepare me for my eventual goal.

As several of you members already know, I hope eventually to publish a definitive work on the zoomorphic money weights of southeast Asia--the lions, birds, and elephants often referred to as opium weights--using my own material, that in a couple of nearby museums, and if possible that in the various ISASC collections. But the artistic variables are so numerous, that I have felt unqualified to begin.

Feeling that Albert Eaches' excellent resume' of the development of scales ought logically to be followed by a history of weights, I began an outline but quickly realized that the subject was too broad for one newsletter. So I chose a particular culture--the Ashanti--and began some more thorough research than I had previously done. I became aware that while anthropologists disagree on the matter of which weights represent which proverbs, and whether the geometrics have symbolic meaning, they all conclude that the design itself has absolutely no relation to the mass of the weight.



Aha! Here was a whole series of weights, the standards of which have never been recorded statistically. An anthropologist at UC Berkeley had begun a book on the Ashanti weights some years ago, and I talked with him to see whether he had finished it, but he had put that project aside temporarily after reaching some conclusions on the proverb weights. He encouraged me to collect the data from as many sources as possible and do a statistical study on the Ashanti weight standards. Sooooooooooooo--that's just what I am going to do.

The membership roster lists several collectors with both Ashanti and Asian weights. I will be very happy to hear directly from any of you who want to participate in my study, right away, of the Ashantis, and/or at a later date of the Asians. I will set up specifications and communicate with those who indicate an interest.

The pages following will deal, in general, with the Ashanti culture as related to production and use of the gold weights. Since this is in the nature of a private letter, and not for publication, I have duplicated illustrations and charts from some of the reference books.

For the benefit of new collectors, who may have experienced the same difficulty I had initially in finding reference material, I am listing a few books available at the present time:

Petrie, Flinders	ANCIENT WEIGHTS AND MEASURES	from Joel Malter
Kisch, Bruno	SCALES AND WEIGHTS	from Bob Roberts
Sheppard & Musham	MONEY SCALES AND WEIGHTS	from DISCOVERIES Rt 1 Box 205B Suisun CA 94585
Rush & O'Keefe	WEIGHTS & MEASURES	from METHUEN & CO LTD 11 Fetter Lane London EC 4
Ridgeway, William	ORIGIN OF COIN CURRENCY & WEIGHT STANDARDS,	from ATTIC BOOKC LTD 41 East 57th St New York NY 10022
Doursther, Horace	DICTIONNAIRE DES POIDS ET MESURES	from MERIDIAN PUBLISHING PO Box 4061 Amsterdam
Catalogue,	Section K, POIDS ET MESURES , from	CONSERVATOIRE des ARTS ET METIERS 292 Rue Saint Martin 75141 Paris

The last two titles, while in French, are quite useable. The catalogue contains photographs of some items, and instructions for ordering photographs of others if desired.

Best regards to all members,

*Ruth E. Willard*

New members: Feb 1, 1980 Eric P Newman, PO Box 14020  
St Louis Mo 63178  
Mar 1, 1980 Dr Lyle B McGinnis  
1616 13th Ave  
Huntington, W. Va 25701  
Apr 1, 1980 Gerald L Mindel Oil Fox Run  
Poughkeepsie NY 12063



Ruth E Willard  
PO Box 27565  
San Francisco CA 94127

## THE ASHANTI

### Brief historical background

Originally sedentary gardeners in the grasslands of the western Sudan, the Ashanti were driven into the heavy equatorial forests of the Gold Coast by the Moslem nomads, swift-mounted horsemen. As they advanced through the territory of their more pacific, artistic Negro relatives, the Bron people of Takiman, the militaristic Ashanti began to assimilate the Bron culture, in much the same way as the Roman society had earlier taken on the Greek characteristics.

Until World War II, the acquisition of gold was the occupation and preoccupation of the Ashanti. Slaves hacked out the gold in the steaming jungles, taking each day's production to their masters. Slavery was endemic in Africa at that time; however it did not have the negative connotation that later developed. A slave could marry into the nobility and win his freedom. There were only the two classes. Interestingly, the Ashanti and the Mandingo, of ROOTS fame, were among those tribes famous for holding large numbers of slaves.

For centuries, trade with the gold-rich regions was a monopoly of North African and Arabian peoples, who exchanged salt, metals, textiles, and jewelry for the gold. Other interested parties were denied the use of the traditional trade routes, and the search for free access to the gold-regions led to the exploratory voyages along the west coast of Africa which brought Antam Goncalves of Portugal to the Guinea Coast in 1441. The appearance in Europe of Goncalves' cargo--gold dust and negro slaves--stimulated further Portugese expeditions, and soon the English and the Dutch were obtaining the coveted metal in the same way. Until the discovery of the New World, nearly all the gold used in Europe came from Africa.

The peoples of Ghana have had various forms of currency in the course of their history, apart from the barter system. Iron, the original currency, was followed successively by brass, cowries, gold dust, and silver. The use of gold dust as currency was abolished by decree in 1889, but not until World War I did the use of coins reach the interior, and as late as 1959 Kyerematen found certain rulers using the gold weights to measure the proper amounts of gold dust for royal burials.

Because of the precious nature of the metal, it was essential that only the proper amount be parted with, and this led to the development of the system of weighing and what came to be known as the Goldweights. When and where the weights and balances were first used in West Africa has not been established, and the only tradition in the Akan area is a legend of a Bono prince who journeyed to the great cities of the Sudan, where he learned the use of weights and balances. A Portugese report of 1594 describes the use of highly sensitive scales and cubic brass weights to weigh gold dust by the Mandingos on the Gambia, and in 1602 Marees reported that the natives on the Guinea coast manufactured and used metal weights and balances with circular pans.

The name abrammo (plural: mbrammo) was applied to the gold weights. In addition to the famous metal weights, the term includes seeds, stones, snail shells, bones, crocodile stones, pendants, containers for nested weights, flintstones, coins, buttons, belt buckles and hooks, toothed







wheels, glass beads, and fragments. Anything which appealed to the owner of a set of weights, and had a mass equal to a given unit, could be used. In smaller sets, these psuedo weights often constituted half of all the forms, especially in the smaller units of measure.

The average set included weights up to a value of £8. Heavier weights were generally kept at home and taken out only when needed, but those needed in daily transactions were kept at hand, even on war parties. Weights of the chief were usually slightly heavier than those of his subjects, the difference being used to pay the expenses of the court.

A young man ready for marriage was provided by his father with a small set of weights, a container to keep them in, starting capital amountin to about £2 and a rifle, in order to earn a livelihood and support a family. Women could use the weights of their husbands, inherit from their mothers, or acquire their own weights through their own efforts. But only men received them routinely.

Goldsmiths produced the weights by the lost wax method which reached its zenith in the 18th and 19th eenturies. The shapes were formed of beeswax, either solid or around a core of clay which was later discarded, leaving a hollow casting. Designs might be carved out, or applied by adding details fashioned out of tiny cylinders of wax.

The desired weight was shaped, with an attached molding stick, also of wax. This was then covered with a thin layer of fine clay and encased in coarser clay mixed with palm-nut fiber. After the clay had hardened, the wax was melted out, through the channel left by the molding stick. Next, the smith took a small crucible into which he had put some small pieces of brass rod, and encased the whole in clay. This was was placed over a furnace until the metal was melted....a judgment which the smith made by observing the colors in the flame. It was next removed and quickly inverted, then allowed to cool gradually. The outer casing was removed, the handle filed off close to the head, and the weight cleaned up and polished.

Excess projections were sometimes left, and sometimes removed by filing. Remains of the moulding stick were often left, to make up a deficiency in the weight. Deficiencies might result from underestimating the amount of metal required, from air bubbles, or from too narrow passages in the mold. Weights which did not meet the standard mass, were adjusted either upward by adding bits of wire, or downward by filing away portions. Flaws which did not interfere with the proper mass were seldom removed.

Stocks of the goldworkers often contained several casts nominally of the same weight and appearance, but varying somewhat in actual weight. Unlike many cultures, the Ashanti do not see this as at all open to criticism. "If a man is fool enough not to notice whether the same weight is used for paying out as receiving the dust, surely that is his fault" is the argument.

None of the figurative weights is marked with the amount of the mass, even though the same motif is often found in entirely different sizes. This would indicate that the form was unrelated to the function. Every owner knew the mass of his own weights. The corresponding weights of buyer and seller would be comapred and adjusted in each transaction.



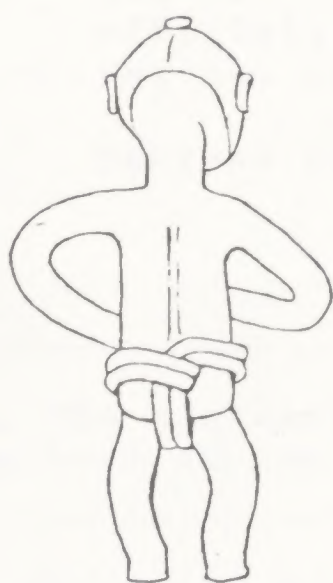


The geometric weights are considered the oldest, and many authors have sought to attribute symbolic meanings to the designs. However, it seems quite certain that they were merely ornamental, perhaps derived from the coin weights of other cultures. Certain shapes resemble Roman and Byzantine weights; other symbols may have derived from gaugers marks and other ornamentation on European coin weights.

The smaller fauna and flora were often cast from life--the so-called "lost beetle" process....insects, nuts, fruits, crabs, and so on. All the fauna depicted are indigenous except two--the oryx antelope from the north, and the sawfish from the coastal regions, often depicted with a human face, because of its importance to their economy. Then, there are the fantastic creatures--birds with a body in the shape of a knot, or wings made of cannonwheels. The animals modeled in wax display a great variation in style, from comparatively naturalistic forms to highly stylized ones.

In human figures, characteristic details are usually depicted--hair styles, clothing, and equipment. Many books have been written on the "proverb weights", and it is certain that in many cases they did have an allegorical meaning. Another less well known function was to record for posterity the proper regalia, tools, musical instruments, and customs, since the Twi language spoken by the Ashanti was never written.

Birds, fish, reptiles, insects, people engaging in all their daily occupations, tools, weapons, chairs, stools, ceremonial regalia, and a host of enigmatic geometric designs--these small bronze, copper, and brass were among the first African art to be appreciated and collected by the western world.



Detail of Loin Cloth



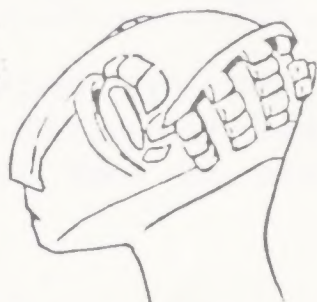
Parts of construction



Warrior



Young courtier



Executioner



Town Crier







According to Mengel,  
There are 61 weight designations in the Ashanti system; of these,  
the following 18 are considered basic:

Weight	Value	Explanation of the name
Mo-aba	$\frac{1}{4}$ d.	Weight of a rice seed. Not often used.
Powa	$\frac{1}{2}$ d.	Po= knot; wa=diminutive suffix Powa was the basic value for small purchases. Gold dust was weighed out and tied up in pieces of cloth and given to children so they could buy something to eat at the market.
Pesewa	1 d.	Derived from Peso, a coin common in the coastal trade, & wa, a diminutive suffix. Powa and Pesewa are two sizes of seed from a leguminous plant.
Damma	2 d.	name of the seed of the leguminous Abrus Precatorius
Kokowa	$4\frac{1}{2}$ d.	Refers to the value of a week-old chick
Taku	6 d.	Term taku koko = value of a 3 week old pullet Taku is a black seed of an indeterminate kind.
* Soa	6s.	No explanation found for this term
Domma	7s.	Derived from adommaba, seed of another plant
Brofa	8s.	Derived from the name for Europeans
Agyiratwe	9s.	Associated with the cola trade with the North
Bodammo	11s.	Possibly the value of a glass bead, or a dog.
Nsano	13s.	From nsa = alcohol & ano = price; the value of a case (12) of Dutch gin
Suru	20s.	An artisan asked to make such a weight for use by an Ashanti king would know enough to make it so the value of the gold dust would be 22s.6d. (suru-pa); this illustrates the proverb "A chief's weights are not the same as a poor man's weights." This is not pure roguery, however; the difference was needed to pay the numerous officials at court, with whom to settle directly was not considered etiquette.)
Asia	26s.	
Dwoa	30s.	Derived from the kernel of the oil palm fruit
Osuaa	40s.	
Bennaa	140s.	
Predwan	160s.	

\* According to Plass, the smallest brass weight, the Ntaka, worth 1s.  
and weighing about as much as ten abrus seeds, would be inserted here.

Almost no statistics about the actual weight of the various goldweights  
have been found. These are the values of the various amounts of gold  
dust in pounds sterling in 1959. *Mengel lists 1309 metric wts*  
*Ketty " 63 Tray "*

According to Kyerematen, the weights ranged upwards from .02 grams to  
the largest known weight, 1,385 grams. Ordinary ones for trading  
purposes measure not more than an inch or two in length, breadth, or  
diameter.

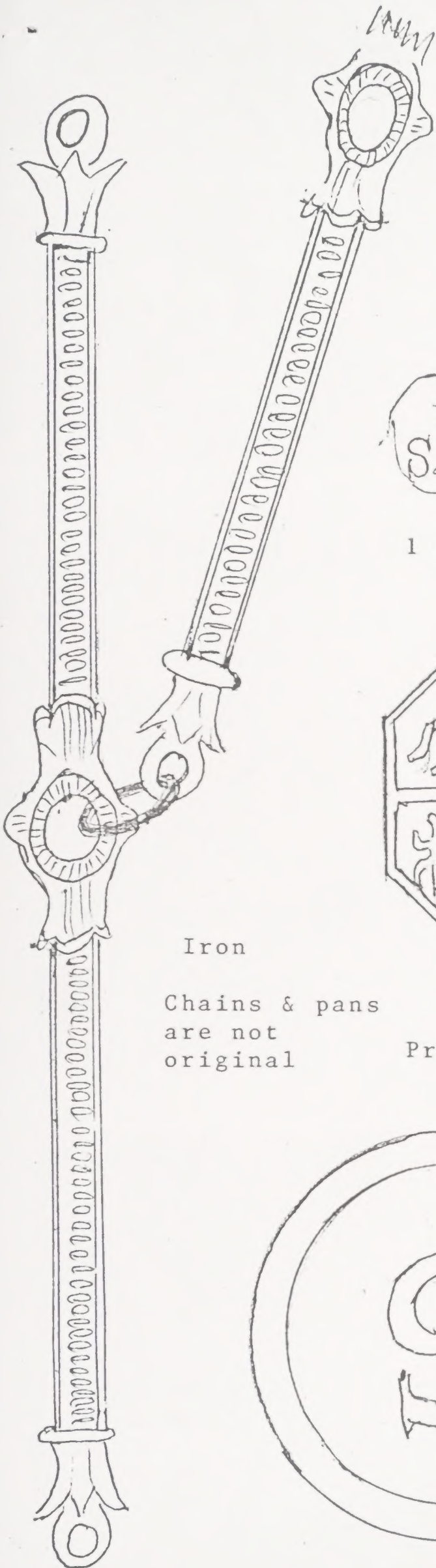






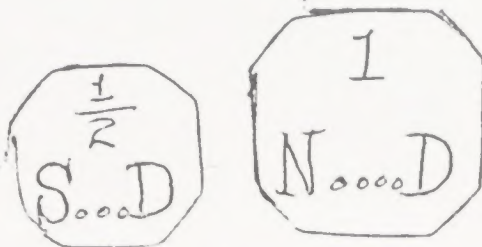
# MYSTERIES IN THE WILLARD COLLECTION

Any help in further identification of these items will be appreciated.



Iron

Chains & pans  
are not  
original



BRASS

1 oz T      2 oz T



IRON

41 grams

Prob. XVI C China



LEAD

85.8 grams

Poss. Phoenician

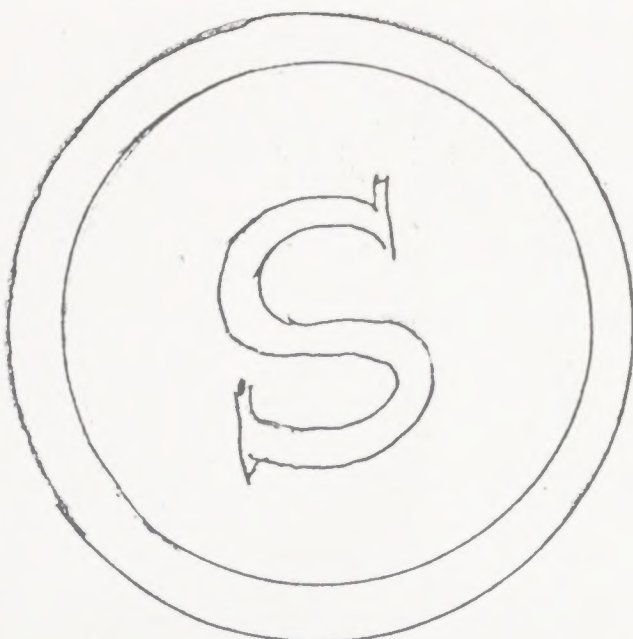


Brass fragment  
23.4 grams



Brass fragment  
19.8 grams

Acquired in Turkey



Bronze

423 grams



Bronze

26.3 grams



